

Date: Tue, 14 Sep 93 04:30:01 PDT
From: Packet-Radio Mailing List and Newsgroup <packet-radio@ucsd.edu>
Errors-To: Packet-Radio-Errors@UCSD.Edu
Reply-To: Packet-Radio@UCSD.Edu
Precedence: Bulk
Subject: Packet-Radio Digest V93 #269
To: packet-radio

Packet-Radio Digest Tue, 14 Sep 93 Volume 93 : Issue 269

Today's Topics:

 Digipeater
 ftp.demon.co.uk INCORRECT
 how to put MFJ TNC-2 into KISS mode?
 HOW TO WIRE TINY2<=>TINY2 NODE?????
 MicroSoft to charge for Windows help
 packet help (2 msgs)
 TCP/IP and PACKET

Send Replies or notes for publication to: <Packet-Radio@UCSD.Edu>
Send subscription requests to: <Packet-Radio-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Packet-Radio Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/packet-radio".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 13 Sep 93 14:30:39 GMT
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu
Subject: Digipeater
To: packet-radio@ucsd.edu

In article <1993Sep13.031728.22916@uxmail.ust.hk> ee_hflo@uxmail.ust.hk (ee_help)
writes:

> How a digipeater work ? Is it same as a repeater ?

A digipeater is a store and forward relay node. Unlike common repeaters,
it does not retransmit what it hears until it has received the entire
frame, validated it, and determined that the frame is requesting the
particular node to retransmit it now. This information is in the AX25
header of each frame.

Amateur digipeaters normally operate in simplex mode on a single

frequency, alternately listening and transmitting, though they can be used on split frequencies. Repeaters normally operate on two separate frequencies in the same band, or crossband, and repeat in realtime, or near realtime, everything they hear on the input channel to the output channel. They may or may not use bit regeneration, but they do not validate the frame, nor do they check to see if they are being requested to relay the frame.

Repeaters have several advantages over digipeaters, and a few disadvantages. Because the digipeater has to receive the entire frame before it starts to retransmit it, it takes 2X+ the channel time of an unrelayed frame. A repeater, because it repeats in realtime, doesn't slow down the frame relay except for some initial keyup delay at the start of activity. Thus a digipeater cuts the effective throughput of a channel in half while a repeater does not. A repeater offers another more important advantage. It allows every station to hear every other station. This is because all stations transmit on the repeater input and listen on the repeater output. Everything the repeater hears, every station hears. This eliminates a problem called the hidden terminal problem which is the bane of simplex digipeater operation.

Because digipeaters and repeaters are sited at preferred locations, often the highest spot around, they hear every transmission made in the area. Because user stations generally aren't in such preferred locations, they generally don't hear most of the other stations on channel. This can result in collisions because several user stations may key up on top of each other because they can't hear each other. But the digipeater can, and what it receives is then just a scrambled mess. So it won't retransmit *any* of the frames being sent. Since packet is an ARQ protocol, all the user stations will continue to try to send their frame, and will continue to collide and little channel throughput will occur. This problem is greatly reduced by a repeater. Since every station monitors the repeater output, they hear every other station on the network. So if another station is transmitting, they will refrain from transmitting until the other station finishes it's transmission. This solves the hidden terminal problem and greatly increases the channel's effective capacity.

Now I mentioned that repeaters have some disadvantages. The first should be obvious, two frequencies are used instead of one. This is offset by the higher utilization the repeater offers. The second disadvantage of the repeater is that if it fails, all stations on the network are out of service even if they were in simplex range of each other. This is because they aren't listening on the frequency on which they are transmitting. An operator must intervene and change the frequencies of the radios to maintain partial network operation in case of repeater failure. Repeater owners usually go to great pains to maintain reliable service so this usually isn't a serious concern.

Gary

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Gary Coffman KE4ZV          | "If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good   | uunet!rsiatl!ke4zv!gary
534 Shannon Way           | enough for Uncle Sam." | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244    | -Ray Stevens           |
```

Date: 13 Sep 1993 19:58:43 +0200
From: mcsun!sun4nl!hacktic!not-for-mail@uunet.uu.net
Subject: ftp.demon.co.uk INCORRECT
To: packet-radio@ucsd.edu

Hello

Hmm, I can reach it with as demon.co.uk ,so without the ftp in front of it. They have some pretty good stuff there. (Simtel20 mirror)

Bye

-martin-

--

```
| "I-Man satta on the mountain top. | Name      : Martin Heffels      |
| Watching Babylon burning red hot" | e-mail   : zap@hacktic.nl      |
| - War inna Babylon, Max Romeo -   | air-mail: PE1EEC@PI8JOP.NLD.EU |
```

Date: Mon, 13 Sep 1993 17:47:52 GMT
From: swrinde!elroy.jpl.nasa.gov!avdms8.msfc.nasa.gov!europa.eng.gtefsd.com!
howland.reston.ans.net!vixen.cso.uiuc.edu!newsrelay.iastate.edu!news.iastate.edu!
jvp@network.ucsd.edu
Subject: how to put MFJ TNC-2 into KISS mode?
To: packet-radio@ucsd.edu

In <CD7rq6.CDn@hip-hop.suvl.ca.us> dave@hip-hop.suvl.ca.us (David Black) writes:

>I have a used MFJ TNC-2 with a KISS-capable eprom inside.
>KISS ON flips the KISS flag but the unit continues to operate
>in AX25 (cmd:) mode. Following this with RESET resets the TNC,
>along with the KISS flag. Far as I know, all necessary mods
>have been made for proper operation with the current eprom.

>Is there a way to put this MFJ TNC-2 into KISS mode?

Just off the top of my head (it's been awhile so the cob-webs are pretty thick back there), try RESTART instead of RESET.

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+-----+
| Jim Van Peurse - Dept of EE and CprE - Iowa State University |
| Ames, IA 50011 - internet: jvp@iastate or tools1.ee.iastate.edu |
+-----+
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Date: Mon, 13 Sep 1993 10:57:00 GMT
From: swrinde!elroy.jpl.nasa.gov!usc!sol.ctr.columbia.edu!news.kei.com!ub!
acsu.buffalo.edu!ubvms.cc.buffalo.edu!oopdavid@network.ucsd.edu
Subject: HOW TO WIRE TINY2<=>TINY2 NODE?????
To: packet-radio@ucsd.edu

I have tried to use TheNet 2.10 for a back to back Tiny2 node by using the wiring diagram in the Tiny2 manual. Using that information the nodes work independently, but do not recognize that they are wired to each other. I have called PacComm. They are no help. I do not have ANY documentation on TheNet. The units work FINE when addressed with the standard PacComm chip attached to my computer OR when attached with 2.10 to a "node stack" with NX2P hardware. How do I CORRECTLY attach two Tiny2 units together "back to back" with TheNet and create my intended node?????

73, Dave.

KN2M

Date: Mon, 13 Sep 1993 18:39:39 GMT
From: swrinde!elroy.jpl.nasa.gov!avdms8.msfc.nasa.gov!sol.ctr.columbia.edu!
news.kei.com!das.wang.com!wang!dbushong@network.ucsd.edu
Subject: MicroSoft to charge for Windows help
To: packet-radio@ucsd.edu

twright@freenet.scri.fsu.edu (Tim Wright) writes:

>A newspaper item from the Saturday Lexington-Herald Leader Lexington,
>Ky 9/11/93 states that the MicroSoft Corp. said yesterday that it
>will begin charging customers who call for help with its WINDOWS
>operating system. Individuals may be charged \$2 a minute, to a
>maximum of \$25 a call, and companies thousands of dollars annually
>under a pricing structure that takes effect Oct 1.

>Views/Thoughts?

Just one: what does that have to do with rec.radio.amateur.packet?

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Dave Bushong, Wang Laboratories, Inc. Amateur Radio Callsign KZ1O
Project Leader, Recognition products kz1o@n0ary.#noca.ca.na
Internet: dbushong@wang.com ARRL VE // W5YI VE

Date: 13 Sep 93 17:19:26 GMT
From: news-mail-gateway@ucsd.edu
Subject: packet help
To: packet-radio@ucsd.edu

Date: Tue, 07 Sep 93 18:04:12 GMT

> From: pipex!uknet!mcsun!sun4n1!hacktic!utopia.hacktic.n1!consolat.hacktic.n1!zer
> Subject: Anybody?
> To: packet-radio@ucsd.edu
>
> Hello,
>
> I was wondering if there's anybody here who'd like to explain
> me some basics on packet radio (a FAQ perhaps) ?
>
> Mailing is probably the way to go or y'all will be fed up with
> me very soon :).
>
> Mind you, I don't know ANYTHING yet, but I'm interested and I wanna
> be 'packeting'/'HAMming' whatever it's called, as soon as possible..
>
> Please? Zerial..
>

You might get more response if you mention your email address. Many of us read the news posts as digests from ucsd.edu and a lot of the message header is deleted to save space. The "From:" line on your message is about 80 chars of site!site!site!site...

Thanks and 73,
de km6wt, mont, mont@ibmmail.com

Date: 13 Sep 93 17:43:49 GMT
From: ogicse!news.tek.com!cascade.ens.tek.com!ronk@network.ucsd.edu
Subject: packet help
To: packet-radio@ucsd.edu

In article <9309131727.AA18836@ucsd.edu>, mont@ibmmail.COM writes:

|> Date: Tue, 07 Sep 93 18:04:12 GMT

|>

|>

|> > From: pipex!uknet!mcsun!sun4nl!hacktic!utopia.hacktic.nl!consolat.hacktic.nl!
zer

|> > Subject: Anybody?

|> > To: packet-radio@ucsd.edu

|> >

...

|>

|> You might get more response if you mention your email address. Many
|> of us read the news posts as digests from ucsd.edu and a lot of the
|> message header is deleted to save space. The "From:" line on your
|> message is about 80 chars of site!site!site!site...

|>

|>

Thanks and 73,

|>

de km6wt, mont, mont@ibmmail.com

|>

Don't blame the originator. The digester need a little work! It moved the
'Path:' line information which is NOT supported for mail purposes to the
'From:' line! The original headers (broken for clarity) follow:

Path: news.tek.com!uunet!pipex!uknet!mcsun!sun4nl!hacktic!
utopia.hacktic.nl!consolat.hacktic.nl!zerial.hacktic.nl!zerial
From: zerial@zerial.hacktic.nl (Zerial)
Newsgroups: rec.radio.amateur.packet
Subject: Anybody?
Message-ID: <PPqi0B4w165w@zerial.hacktic.nl>
Date: Tue, 07 Sep 93 18:04:12 GMT
Lines: 13

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Ron Kirkpatrick
News Administrator/Postmaster
Tektronix, Inc
503-627-6707

Date: 13 Sep 93 12:50:21 GMT

From: ogicse!emory!darwin.sura.net!howland.reston.ans.net!usenet.ins.cwru.edu!
cleveland.Freenet.Edu!do788@network.ucsd.edu

Subject: TCP/IP and PACKET

To: packet-radio@ucsd.edu

I'm planning on using SLIPP soon and I need info on packet radio
packet radio , any comments on what I should do or use would be greatly
appreciated, also wher I could find any text on the subject.

Thanx in advance

End of Packet-Radio Digest V93 #269
